

TRANSLATION

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>40 659</b>	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. <b>PCT/AT2004/000419</b>	International filing date (day/month/year) <b>30.11.2004</b>	Priority date (day/month/year) <b>10.12.2003</b>	
International Patent Classification (IPC) or national classification and IPC <b>E21F13/02</b>			
Applicant <b>VOEST-ALPINE BERGTECHNIK GESELLSCHAFT M.B.H.</b>			

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <u>2</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>
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<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>
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Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/AT2004/000419

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 

This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
 
  - international search (Rule 12.3 and 23.1(b))
  - publication of the international application (Rule 12.4)
  - international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
 

the international application as originally filed/furnished  
 the description:  
 pages 1-7 \_\_\_\_\_ as originally filed/furnished  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 the claims:  
 nos. \_\_\_\_\_ as originally filed/furnished  
 nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
 nos.\* 1-7 received by this Authority on 07.02.2006 with telefax  
 nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 the drawings:  
 sheets 1/2, 2/2 \_\_\_\_\_ as originally filed/furnished  
 sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3.  The amendments have resulted in the cancellation of:
 

the description, pages \_\_\_\_\_  
 the claims, nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (*specify*): \_\_\_\_\_  
 any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 

the description, pages \_\_\_\_\_  
 the claims, nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (*specify*): \_\_\_\_\_  
 any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V      **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

## 1. Statement

Novelty (N)	Claims	2-7	YES
	Claims	1	NO
Inventive step (IS)	Claims		YES
	Claims	1-7	NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

## 1. Reference is made to the following documents:

D1: US-A-2 637 457

D2: US-A-2 507 341.

2. The present application fails to satisfy the requirements of PCT Article 33(1) because the subject matter of **claim 1 lacks novelty** (PCT Article 33(2)).

2.1 Document D1 discloses (the references in brackets are to said document) a method for the removal of material mined underground, two vehicles (see figure 3, "shuttle car" and reference sign 1) being utilised in the route section between the working face (7) and a continuously tracked conveying means (see column 2, lines 14-17), and at least one delivery of material being effected, between the working face (7) and the delivery of the material to the conveying means, by a vehicle (1) to a further vehicle ("shuttle car").

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

2.2 According to the amended claim 1, the two vehicles travel over the route section between the working face and the delivery of the material to the conveying means. The expression "travel" signifies only "to move" and since the two vehicles according to D1 move, one back and forth and the other exclusively behind the "continuous miner", it is considered that the feature "travel" is included in D1. In consequence, claim 1 lacks novelty.

3. All the features of claims 2-7 relate to the raisable and lowerable conveying system of each vehicle.

3.1 The **problem addressed** by means of the aforementioned features can therefore be regarded as that of making it possible to unload the vehicle as fast and as effectively as possible, which cannot be considered inventive (PCT Article 33(3)) over the device disclosed in document D2. Said document discloses a vehicle with a linear conveying device ("shuttle car"), which device is located on the vehicle chassis in such a way that it can be raised, lowered and advanced in the conveying direction (see column 1, paragraph 1). A "mine car" can be loaded by means of said conveying device and the use thereof in the vehicle disclosed in document D1 for solving the aforementioned problem is obvious to a person skilled in the art. Claims 2-7 are therefore not considered inventive (PCT Article 33(3)).

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

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**Box No. VII      Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

4. The features of claim 1 are not followed by reference signs placed between parentheses (PCT Rule 6.2(b)).
  
5. Contrary to PCT Rule 5.1(a)(ii), the description does not cite documents D1 and D2 or indicate the relevant prior art disclosed therein.

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

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**Box No. VIII      Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

- 6.1 In claim 1, the expression "travel" is vague and lacks clarity, leaving the reader uncertain as to the meaning of the relevant technical feature. In consequence, the subject matter of said claim is not clearly defined (PCT Article 6).
  
- 6.2 This object could be overcome by means of the additional feature that "the at least two identical vehicles are driven back and forth between the working face and a continuously tracked conveyance means".